



Alan C. Lloyd Ph.D.
Agency Secretary

California Regional Water Quality Control Board

San Francisco Bay Region

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
<http://www.waterboards.ca.gov/sanfranciscobay>



Arnold Schwarzenegger
Governor

Date:
File No. 2119.1058 (LM)

IR Manager, Seal Beach
Attn: Ms. Margaret Wallerstein
Code N45WS
800 Seal Beach Blvd.
Seal Beach, CA 90740-5000

Subject: Case Closure Letter for Underground Storage Tank Site E-85, Naval Weapons Station Seal Beach Detachment Concord, Concord, California (RWQCB Case No. 07D9023)

Dear Ms. Wallerstein:

This letter confirms the completion of a site investigation and corrective action for the underground storage tank formerly located in the Tidal Area west of Born Road between former building E-108 and building E-85. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required. This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code.

Please contact Laurent Meillier of my staff at 510-622-2440 or email Lmeillier@waterboards.ca.gov if you have any questions regarding this matter.

Sincerely,

Bruce H. Wolfe
Executive Officer

Preserving, enhancing, and restoring the San Francisco Bay Area's waters for over 50 years
California Environmental Protection Agency

CC:

Engineering Command Southwest/ Integrated Product Team West
Attn: Mr. Randy Cate
2001 Junipero Serra Blvd.
Suite 600
Daly City, CA 94014-1976

City of Concord
Attn: Mr. James Forsberg
1950 Parkside Dr.
MS/ 1A
Concord, CA 94519

Contra Costa County Health Services Department
Attn: Ms. Sue Loyd
4333 Pacheco Boulevard
Martinez, CA 94553

DTSC
Attn: Mr. Jim Pinasco
8800 Cal Center Drive
Sacramento, CA 95826-3200

USEPA
Attn: Mr. Philip Ramsey
SFD-8-3
USEPA REGION 9
75 Hawthorne St.
San Francisco, CA 94105

Tetra Tech EM Inc.
Attn: Mr. Mark Reisig
10860 Gold Center Dr.
Suite 200
Rancho Cordova, CA 95670

Contra Costa County Environmental Health
Attn: Ms. Agnes Vinluan
2120 Diamond Blvd. Suite 200
Concord, CA 94520

Co-Chair RAB Member
Attn: Ms. Mary Lou Williams
1015 San Miguel Road
Concord, CA 94518-2110



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IR Manager, Seal Beach
Attn: Ms. Margaret Wallerstein
Code N45WS
800 Seal Beach Blvd.
Seal Beach, CA 90740-5000

Subject: Transmittal of Closure Letter and Site Summary for Underground Storage Tank Site E-85, Naval Weapons Station Seal Beach Detachment Concord, Concord, California (RWQCB Case No. 07D9023)

Dear Ms. Wallerstein:

Attached please find the uniform underground storage tank (UST) closure letter and the site closure summary forms for the above referenced USTs. This letter documents that, based on available information, No Further Action (NFA) related to the above mentioned underground storage tank releases is required.

This NFA status applies only to releases of petroleum from fuel USTs at the above referenced site. For those sites where groundwater is polluted by non-petroleum related chemicals or where other sources of petroleum pollution exist (e.g., fuel lines, spills, and above ground tanks), this determination is applicable only to soil and groundwater impacts associated with these UST releases. UST Site E-85 current land use is industrial and commercial. This site was determined to meet Water Board closure criteria for this use scenario. However, the Regional Water Quality Control Board shall be notified of any changes in future land use.

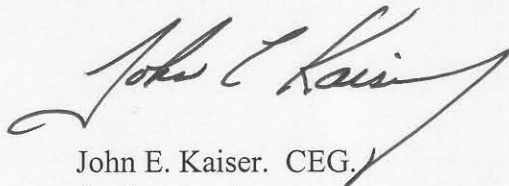
Preserving, enhancing, and restoring the San Francisco Bay Area's waters for over 50 years
California Environmental Protection Agency



Recycled Paper

Please contact Laurent Meillier of my staff at 510-622-2440 or email Lmeillier@waterboards.ca.gov if you have any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "John E. Kaiser". The signature is fluid and cursive, with a long horizontal stroke at the end.

John E. Kaiser. CEG.
Section Leader
DoD/DOE Program Manager
Groundwater and Waste Containment Division

Enclosures

- 1- Case Closure Letter
- 2- Site Summary Form

CC:

Engineering Command Southwest/ Integrated Product Team West
Attn: Mr. Randy Cate
2001 Junipero Serra Blvd.
Suite 600
Daly City, CA 94014-1976

City of Concord
Attn: Mr. James Forsberg
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Attn: Ms. Mary Lou Williams
1015 San Miguel Road
Concord, CA 94518-2110

Site Summary Form

27-Oct-05

Facility Name: Concord NWS

Staff Initials: Laurent Meillier

County Name: Contra Costa

Site: UST E-85

RB File No.: 07D9023

County Code : 07

Address: Born Road
Concord , CA 94520

Hydrology

Nearest Surface Water: Belloma Slough

Direction of GW Flow: North

Distance to Surface Water (ft.): 800

Highest GW Depth (ft): 7

Water Wells Affected?: No

Distance to Wells (ft): >1500

No. Wells: 0

Lowest GW Depth(ft): NA

Groundwater Benef. Use: MUN

Geology

Site Geology: Black, high plasticity silty clay and brown-blue medium placticity silty clay (Bay Mud).

Pit Samples Submitted?: Yes

No. Borings: 1

Ground Elev. (ft.): 9

Site Management

**Potential
Ecological Risk:**

Non-detectable BTEX and low concentrations of TPH-d in samples taken at 8 ft bgs, suggest no impact to terrestrial biological receptors.

Future Land Use: Military, light industrial

Human Health Risk: Concentrations of BTEX detected in soils are below their respective PRGs.

Current Land Use: Military, light industrial

**Institutional
Controls:**

Per 1995 SFB Basin Plan, the existing use applicable to groundwater in the Clayton Valley includes municipal and potential groundwater uses, including domestic, industrial, industrial process, and agricultural water supplies.

**Management
Requirements:**

Current land use is industrial/commercial. If land use changes to residential, RWQCB requires notification of land use change.

Comments:

The site includes a 1,500 gallons capacity UST (Underground Storage Tank) that held diesel fuel used to heat Building E-85. On September 9, 1993, a boring was drilled north of the UST to a depth of 16 feet bgs (below ground surface). A slight petroleum odor was noticed in soil samples collected from 4.5 and 8 feet bgs, and organic vapors were detected (by PID) in both samples. TPH-d was detected at 40 and 48 ppm in the samples. TPH-d was detected in samples collected at 4.5 and 7.5 feet bgs at 12,000 and 98 ppm, respectively. A grab groundwater sample collected from the borehole on September 10, 1993 showed TPH-d detected at 0.1 ppm. Excavation and tank removal commenced on April 22, 1997, and the tank was removed on April 24, 1997. Holes were noted on the bottom of the eastern end of the UST and the bottom of the UST was coated with diesel product. Groundwater was found in the UST pit at approximately 7 feet bgs. Dimensions of the initial excavation measured approximately 17.5 feet long by 6.5 feet wide.

Two soil samples were collected from the east and west sidewalls at a depth of 7 feet bgs on April 24, 1997. Neither TPH-d nor BTEX was detected in the samples. Additional excavation was performed on May 1, 1997 to extend the northern and southern sidewalls approximately 2 feet and to deepen the base of the pit to approximately 9 feet bgs. Final dimensions of the overexcavation measured 17.5 feet long by 10.5 feet wide. Approximately 54 cubic yards of earth materials was removed from the excavation. Three soil samples were collected from the sidewalls and bottom of the pit following overexcavation. A sample collected at 8 feet bgs from the northern sidewall contained 20 ppm TPH-d and contained no detectable BTEX. TPH-d and BTEX were not detected in the other samples. One groundwater sample was collected on May 1, 1997 after overexcavation and was analyzed for TPH-d and BTEX. The sample contained 12,000 ppb TPH-d and 0.84 ppb total xylenes. The UST excavation was dewatered on May 7, 1997 and sampled on May 8 to evaluate the reduction of hydrocarbon levels. Approximately 350 gallons of water were pumped from the excavation and placed in an AST (Above Ground Storage Tank). One sample was collected and analyzed for TPH-d and BTEX. The sample contained 2,500 ppb TPH-d and 0.82 ppb total xylenes. The TPH-d detection exceeds the groundwater Environmental Screening Level (commercial/ industrial scenario) of 100 ppb based on nuisance. However, two groundwater samples taken from E108MW09 in 1998 and 1999, yielded TPH-d concentrations below the detection limit of 0.5 ppb. E108MW09 is located approximately 18 feet downgradient of the former UST site E-85.

The UST excavation was backfilled on May 8, 1997, and the site was paved on May 12, 1997. A total of 70.78 tons of non-regulated petroleum contaminated soil, 7 cubic yards of concrete rubble, and 350 gallons of water were transported and disposed of on May 8, 13, and 21, 1997. Per the Navy statement in the 1998 KTW report: "Impact to ground water by diesel hydrocarbons is inferred to be localized, based on observed site geology, and is not likely to affect human health or the environment."

Reports:

KTW and Associates. 1998. "Report Closure of Underground Storage Tank Site E85." February.

Staff Notes:**Remedial Activity**

<u>Action Taken</u>	<u>Amount (gallons)</u>
<u>Free Product:</u> Diesel fuel and water	75
<u>Soil:</u> Excavate and disposal	70.78 tons
<u>Ground Water:</u> Pumped to AST	350
<u>Vapor:</u> None	0

Groundwater Results, ppb

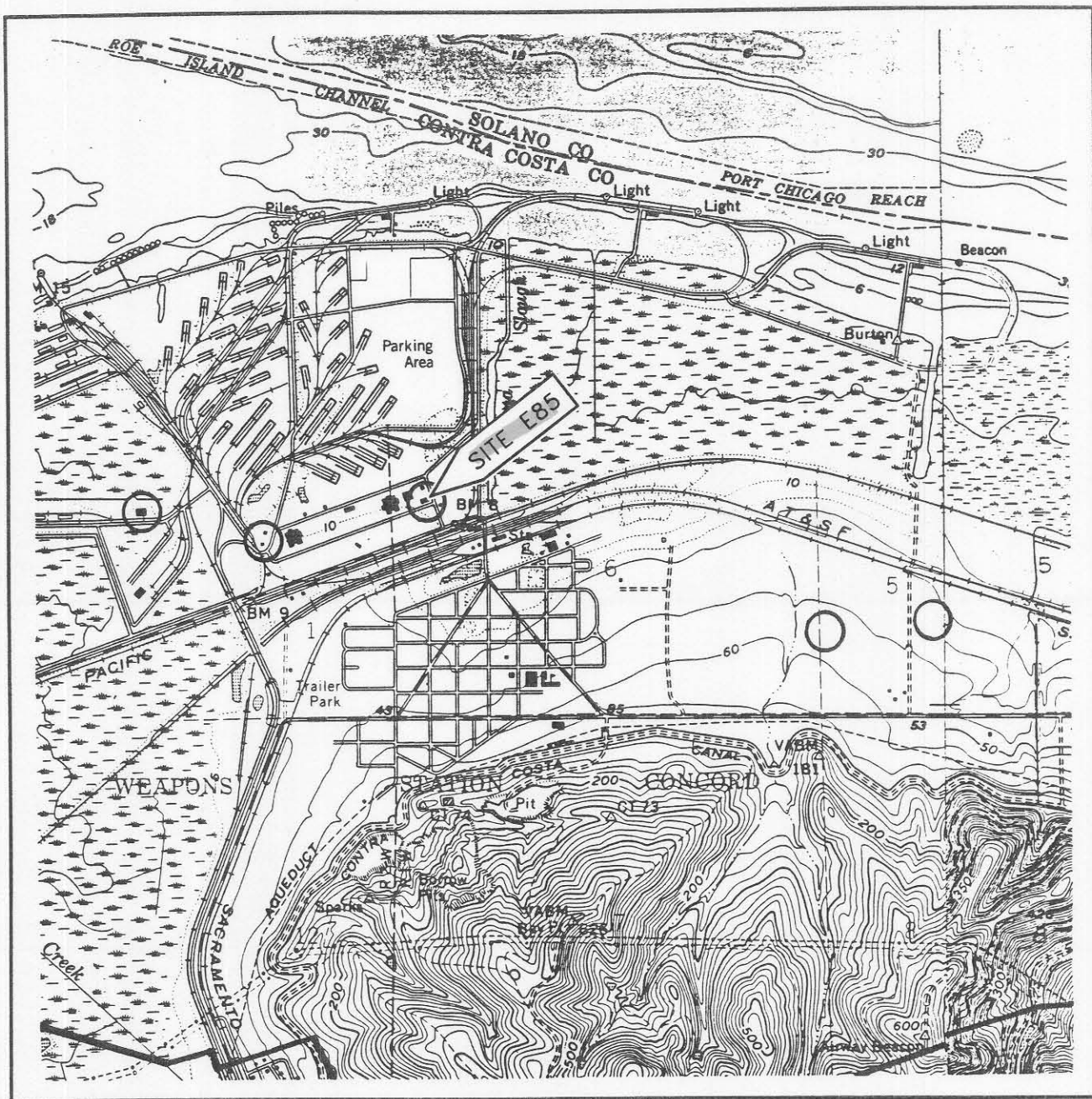
Sampling Date	Sample No	Source Matrix	Sampling Phase	Analyte Name	Qualifier	Value	Unit	MW Elevation	MW Latitude	MW Longitude
4/24/1997	E85-W-9-T1C	Water	Initial	Benzene	<	<0.5	ppm		38.04	-122.02
4/24/1997	E85-W-8-T1C	Water	Initial	Benzene	<	<0.5	ppm		38.04	-122.02
4/24/1997	E85-W-8-T1C	Water	Initial	Ethylbenzene	<	<0.5	ppm		38.04	-122.02
4/24/1997	E85-W-9-T1C	Water	Initial	Ethylbenzene	<	<0.5	ppm		38.04	-122.02
4/24/1997	E85-W-9-T1C	Water	Initial	Toluene	<	<0.5	ppm		38.04	-122.02
4/24/1997	E85-W-8-T1C	Water	Initial	Toluene	<	<0.5	ppm		38.04	-122.02
4/24/1997	E85-W-8-T1C	Water	Initial	Tph-d	<	2500	ppm		38.04	-122.02
4/24/1997	E85-W-9-T1C	Water	Initial	Tph-d	<	12000	ppm		38.04	-122.02
4/24/1997	E85-W-9-T1C	Water	Initial	Xylene	<	0.84	ppm		38.04	-122.02
4/24/1997	E85-W-8-T1C	Water	Initial	Xylene	<	0.82	ppm		38.04	-122.02
5/1/1997	W-9-T1C	WATER	Initial	BENZENE	U	0.5	ppb			
5/1/1997	W-9-T1C	WATER	Initial	ETHYLBENZENE	U	0.5	ppb			
5/1/1997	W-9-T1C	WATER	Initial	TOLUENE	U	0.5	ppb			
5/1/1997	W-9-T1C	WATER	Initial	TPH DIESEL		12000	ppb			
5/1/1997	W-9-T1C	WATER	Initial	XYLENES		0.84	ppb			
5/8/1997	W-8-T1C	WATER	Final	BENZENE	U	0.5	ppb			
5/8/1997	W-8-T1C	WATER	Final	ETHYLBENZENE	U	0.5	ppb			
5/8/1997	W-8-T1C	WATER	Final	TOLUENE	U	0.5	ppb			
5/8/1997	W-8-T1C	WATER	Final	TPH DIESEL		2500	ppb			
5/8/1997	W-8-T1C	WATER	Final	XYLENES		0.82	ppb			
9/30/1998	S047B01	Water	Initial	Benzene	<	<0.1	ppm		38.05	-122.04
9/30/1998	S047B01	Water	Initial	Ethylbenzene	<	<0.1	ppm		38.05	-122.04
9/30/1998	S047B01	Water	Initial	Toluene	<	0.3	ppm		38.05	-122.04
9/30/1998	S047B01	Water	Initial	Tph-d	<	<0.1	ppm		38.05	-122.04
9/30/1998	S047B01	Water	Initial	Xylene	<	0.5	ppm		38.05	-122.04
11/24/1998	E108MW09	Groundwater	Final	TPH-d	<	0.5	ppb			
2/16/1999	E108MW09	Groundwater	Final	TPH-d	<	0.5	ppb			

Soil Results, ppm

DATE	Sample N	Source Matrix	Sampling Depth (ft)	Sampling Phase	Analyte name	Qualifier	Value	Unit	Location and Comments
4/24/1997	S-7-T1E	Soil	7	Initial	BENZENE	U	0.005	ppm	
4/24/1997	S-7-T1W	Soil	7	Initial	BENZENE	U	0.005	ppm	
4/24/1997	S-7-T1E	Soil	7	Initial	ETHYLBENZENE	U	0.005	ppm	
4/24/1997	S-7-T1W	Soil	7	Initial	ETHYLBENZENE	U	0.005	ppm	
4/24/1997	S-7-T1W	Soil	7	Initial	TOLUENE	U	0.005	ppm	
4/24/1997	S-7-T1E	Soil	7	Initial	TOLUENE	U	0.005	ppm	
4/24/1997	S-7-T1E	Soil	7	Initial	TPH DIESEL	U	1	ppm	
4/24/1997	S-7-T1W	Soil	7	Initial	TPH DIESEL	U	1	ppm	
4/24/1997	S-7-T1W	Soil	7	Initial	XYLENES	U	0.005	ppm	
4/24/1997	S-7-T1E	Soil	7	Initial	XYLENES	U	0.005	ppm	
5/1/1997	S-8.5-T1SW	Soil	8	Final	BENZENE	U	0.005	ppm	
5/1/1997	S-8-T1NW	Soil	8	Final	BENZENE	U	0.005	ppm	
5/1/1997	S-8.5-T1SW	Soil	8	Final	ETHYLBENZENE	U	0.005	ppm	
5/1/1997	S-8-T1NW	Soil	8	Final	ETHYLBENZENE	U	0.005	ppm	
5/1/1997	S-8-T1NW	Soil	8	Final	TOLUENE	U	0.005	ppm	
5/1/1997	S-8.5-T1SW	Soil	8	Final	TOLUENE	U	0.005	ppm	
5/1/1997	S-8.5-T1SW	Soil	8	Final	TPH DIESEL	U	1	ppm	
5/1/1997	S-8-T1NW	Soil	8	Final	TPH DIESEL	U	1	ppm	
5/1/1997	S-8-T1NW	Soil	8	Final	XYLENES	U	0.005	ppm	
5/1/1997	S-8.5-T1SW	Soil	8	Final	XYLENES	U	0.005	ppm	
5/6/1997	S-9-T1C	Soil	9	Final	BENZENE	U	0.005	ppm	
5/6/1997	S-9-T1C	Soil	9	Final	ETHYLBENZENE	U	0.005	ppm	
5/6/1997	S-9-T1C	Soil	9	Final	TOLUENE	U	0.005	ppm	
5/6/1997	S-9-T1C	Soil	9	Final	TPH DIESEL	U	1	ppm	
5/6/1997	S-9-T1C	Soil	9	Final	XYLENE	U	0.005	ppm	

Tank Information

TANK NO.	TANK SIZE (gal)	TANK CONTENTS	TANK ACTION	DATE	LATITUDE (Decimal Degrees)	LONGITUDE (Decimal Degrees)
E85	1500	Diesel	Removed	4/27/1997	38.048902338876	-122.0233431313



— = Naval Weapons Station Boundary

○ = Site location

Source: U.S. Geological Survey
7.5-Minute Quadrangles
Honker Bay/Vine Hill, California
Photorevised 1980



Approximate Scale

2000 1000 0 2000 4000



feet

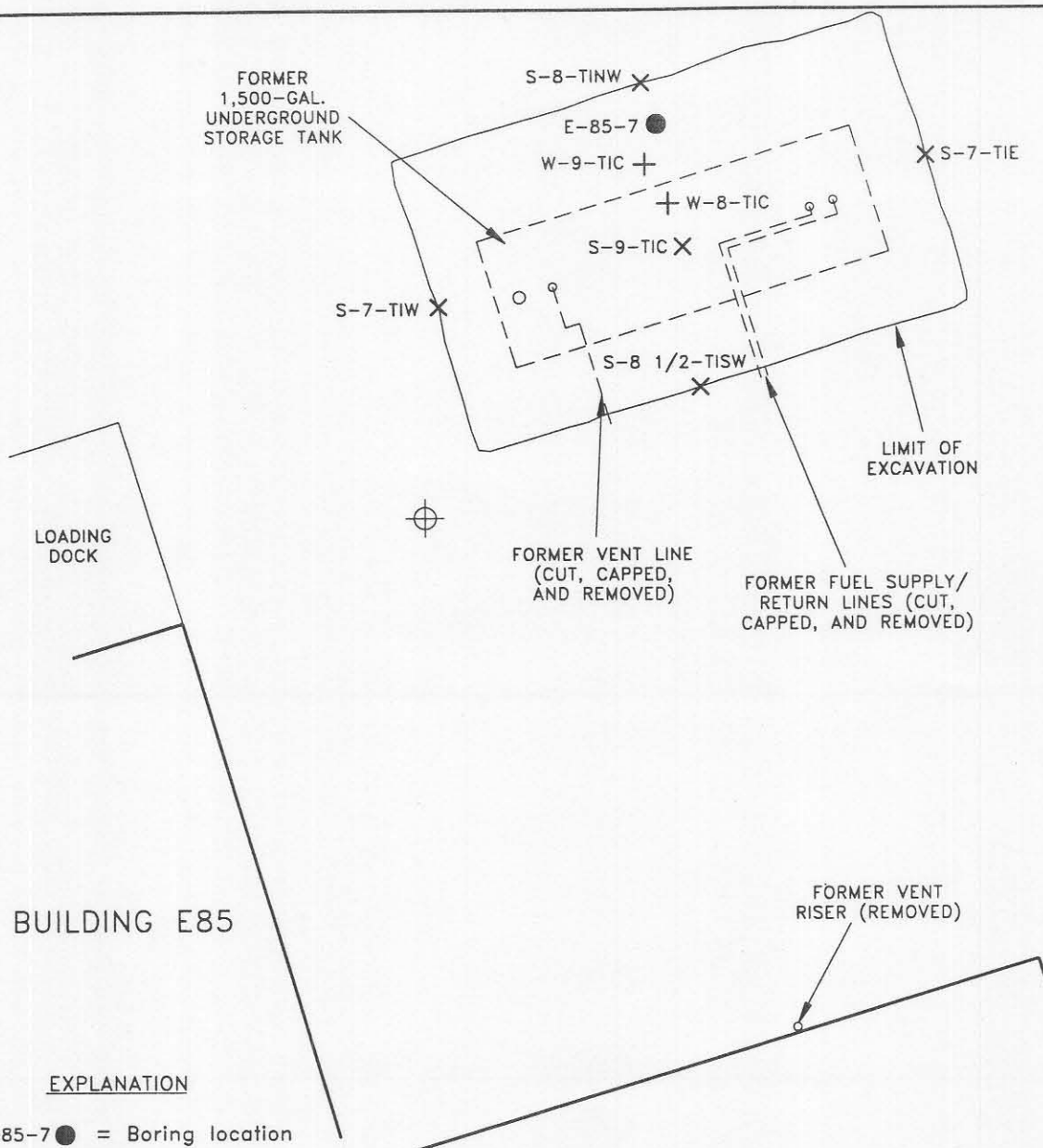
KTN
& ASSOCIATES

PROJECT NO. DON001

SITE VICINITY MAP
Naval Weapons Station
Concord, California

PLATE

1



EXPLANATION

E-85-7 ● = Boring location

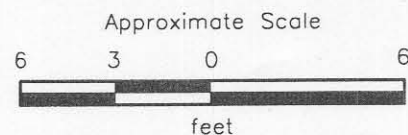
⊕ = Tank pit monitoring well (removed)

S-8 1/2-TISW X = Soil sample location

W-9-TIC + = Water sample location

SAMPLE DESIGNATION

S-9-TIC
 = Center; E=East; W=West;
 NW=North wall; SW=South wall
 = Tank No. 1
 = Depth below ground surface
 = Soil; W=Water



SOURCE: Department of the Navy
 Demolition Plan-Site E85
 Drawing C9
 January 1995

KTW
 & ASSOCIATES

PROJECT NO. DON001

SITE PLAN
 Site E85
 Naval Weapons Station
 Concord, California

PLATE 2